

X_1 is any amino acid residue;
 X_2 is any amino acid residue;
 X_3 is a hydrophobic residue or a hydroxyl-substituted aliphatic residue;
 X_4 is any amino acid residue;
 X_5 is a hydrophobic residue or Gly;
 X_6 is a hydrophobic or a hydrophilic residue;
 X_7 is Gly, an amide-substituted polar residue or a hydrophobic residue;
 X_8 is an amino acid residue other than an aliphatic residue;
 X_9 is an aliphatic residue;
 X_{10} is any amino acid residue;
 Z_3 is (i) a second peptide sequence consisting of 1 to 5 amino acid residues or
(ii) a bond connecting Z_4 to X_{10} ;
 Z_4 is the carboxy terminus of the peptide, Z_4 having the formula $-C(O)OR$ or $-C(O)NRR$;
each R is independently hydrogen, (C_1-C_6) alkyl, (C_2-C_6) alkenyl, (C_2-C_6) alkynyl
or (C_6-C_{14}) aryl;
each "-" between residues X_1 through X_{10} , Z_2 and X_1 and X_{10} and Z_3
independently represents an amide linkage, a substituted amide linkage or an isostere
of an amide linkage; and
each "~" represents a bond.

Claim 2-3 (cancelled)

Claim 4 (previously presented): The compound of claim 1 wherein the
compound exhibits antibacterial activity against a Gram-negative bacterium.

Claim 5 (currently amended): **An isolated compound which inhibits pilus
assembly, said compound comprising SEQ ID NO: 1, wherein the compound is a
mimic of a chaperone G₁ beta-strand and the compound exhibits antibacterial**

activity against a Gram-negative bacterium. ~~The compound of claim 4 wherein said mimic comprises SEQ ID NO: 1 or an analog thereof.~~

Claim 6 (cancelled)

Claim 7 (cancelled)

Claim 8 (previously presented): The compound of claim 1 wherein the compound comprises a mimic of an amino terminal motif of a pilus subunit selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28 and SEQ ID NO: 29.

Claim 9 (currently amended): The compound of claim 8 wherein said mimic of an amino-terminal motif of a pilus subunit further comprises the amino acid sequence SDVAFRGNLL (SEQ ID NO: 12) ~~or an analog thereof.~~

Claim 10 (cancelled)

Claim 11 (cancelled)

Claim 12 (cancelled)

Claim 13 (previously presented): The compound of claim 1 wherein one or more of the following conditions are satisfied:

each "-" between residues X_1 through X_{10} , Z_2 and X_1 and X_{10} and Z_3 is an amide linkage;

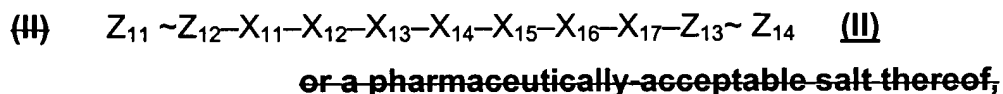
Z_1 is H_2N- ;

Z₄ is -C(O)OH or a salt thereof;
Z₂ is a bond connecting Z₁ to X₁;
Z₃ is a bond connecting Z₄ to X₁₀;
X₁ is an amino acid residue other than a basic residue;
X₂ is an amino acid residue other than an aliphatic residue;
X₃ is an aliphatic residue or T;
X₄ is an amino acid residue other than an acidic residue;
X₅ is an aliphatic residue, F or G;
X₇ is G, N or A; or
X₁₀ is an aliphatic or a polar residue.

Claim 14 (previously presented): The compound of claim 13 wherein the mimic comprises a sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28 and SEQ ID NO: 29.

Claim 15 (cancelled)

Claim 16 (currently amended): An isolated compound which inhibits pilus assembly, or a pharmaceutically-acceptable salt thereof, the compound comprising a mimic of a chaperone G₁ beta-strand or a mimic of an amino terminal motif of a pilus subunit, wherein the mimic is a 7 to 17 residue peptide ~~or peptide analog~~, having an amino terminus and a carboxy terminus, according to formula (II):



wherein:

Z₁₁ is the amino terminus of the peptide, Z₁₁ having the formula R'-C(O)-NR'- or R'R'N-;

Z_{12} is (i) a first peptide sequence consisting of 1 to 5 amino acid residues or (ii) a bond connecting Z_{11} to X_{11} ;

X_{11} is any amino acid residue;

X_{12} is any amino acid residue;

X_{13} is a hydrophobic residue;

X_{14} is any amino acid residue;

X_{15} is a hydrophobic residue;

X_{16} is any amino acid residue;

X_{17} is hydrophobic residue or a hydroxyl-substituted aliphatic residue;

Z_{13} is (i) a second peptide sequence consisting of 1 to 5 amino acid residues or (ii) a bond connecting Z_{14} to X_{17} ;

Z_{14} is the carboxy terminus of the peptide, Z_{14} having the formula $-C(O)OR'$ or $-C(O)NR'R'$;

each R' is independently hydrogen, (C_1-C_6) alkyl, (C_2-C_6) alkenyl, (C_2-C_6) alkynyl or (C_6-C_{14}) aryl;

each "-" between residues X_{11} through X_{17} , Z_{12} and X_{11} and X_{17} and Z_{13} independently represents an amide linkage, a substituted amide linkage or an isostere of an amide linkage; and

each "~" independently represents a bond.

Claim 17 (previously presented): The compound of claim 16 wherein one or more of the following conditions are satisfied:

each "-" between residues X_{11} through X_{17} , Z_{12} and X_{11} and X_{17} and Z_{13} is an amide linkage;

Z_{11} is H_2N- ;

Z_{14} is $-C(O)OH$ or a salt thereof;

Z_{12} is a bond connecting Z_{11} to X_{11} ;

Z_{13} is a bond connecting Z_{14} to X_{17} ;

X_{11} is an amino acid residue other than a basic residue;

X_{13} is an aliphatic residue or M;

X_{14} is an amino acid residue other than an aromatic residue;

X₁₅ is an aliphatic residue, F or M; and
X₁₇ is an aliphatic residue, F, M or a hydroxyl-substituted aliphatic residue.

Claim 18 (cancelled)

Claim 19 (currently amended): The compound of any one of claims 1, ~~2~~, 5, 8, 9, 13, 14, 16, or 17 wherein said compound exhibits antibacterial activity against one or more Gram-negative bacterium selected from the group consisting of *E. coli*, *H. influenzae*, *S. euteriditis*, *S. typhimurium*, *B. pertussis*, *Y. pestis*, *Y. enterocolitica*, *H. pylori* and *K. pneumoniae*.

Claims 20-135 (cancelled)

Claim 136 (previously presented): An isolated compound which inhibits pilus assembly, the compound consisting of SEQ ID NO: 12.

Claim 137 (previously presented): An isolated compound which inhibits pilus assembly, the compound consisting essentially of SEQ ID NO: 12, wherein the compound is a mimic of an amino terminal motif of a pilus subunit.

Claim 138 (previously presented): An isolated compound which inhibits pilus assembly, the compound comprising a mimic of an amino terminal motif of a pilus subunit, wherein the mimic comprises SEQ ID NO:12.

Claim 139 (previously presented): The compound of claim 138 wherein the compound competitively binds to a pilus subunit hydrophobic groove.

Claim 140-158 (cancelled)

Claim 159 (**new**) The compound of claim 1 wherein the compound consists essentially of a 10 to 20 residue peptide according to formula (I).